

REMARKS

The Examiner rejects claims 1-49 under 35 U.S.C. §102(e) as being disclosed by U.S. 7,073,055 to Freed, et al.

Applicant respectfully traverses the Examiner's rejections. Freed, et al., fails to teach or suggest at least the following italicized features of the pending independent claims:

1. A method for remotely servicing a computational component, comprising:
providing a firewall and a computational component requiring servicing *from a servicing entity responsible for servicing the computational component requiring servicing*, the firewall analyzing packet communications to the computational component *and being configured to block packets comprising servicing commands from the servicing entity*;
establishing, through the firewall, a session *with a servicing computational component*, the *servicing entity* being associated with the servicing computational component, *wherein packets of the session comprise servicing commands from the servicing entity and responses, from the computational component requiring servicing, to the servicing commands*, wherein the incoming session packets are permitted to pass through the firewall, *wherein the session packets are of a session-type otherwise permitted by the firewall and unrelated to servicing, by the servicing entity, of the computational component, and wherein the packets omit payload normally associated with packets of the session type*;
receiving, by the firewall, an incoming packet associated with the session, the incoming packet comprising a machine executable servicing command *from the servicing entity* for execution by the computational component requiring servicing; and
forwarding, by the firewall, the *servicing command* to the computational component requiring servicing.

18. A system for remotely servicing a computational component, comprising:
a firewall operable to analyze incoming communications to a computational component requiring servicing *and block servicing commands from a servicing entity responsible for servicing the computational component requiring servicing and transmitted by a servicing computational component*;
a data collection agent operable to (a) establish, through the firewall, a session *with the servicing computational component, packets of the session comprising servicing commands from the servicing entity and corresponding responses by the computational component requiring servicing*, wherein the session packets are of a session type otherwise permitted by the firewall but unrelated to servicing of the computational component requiring servicing, and wherein the packets omit payload normally associated with packets of the session type, (b) receive, through the firewall, an incoming packet associated with the session, *the incoming packet comprising a machine executable servicing command from the servicing entity for the computational component requiring servicing*, and (c) forward the *servicing command* to the computational component requiring servicing.

33. A method for remotely servicing a computational component, comprising:

- providing a firewall and a computational component requiring servicing, the firewall analyzing communications to the computational component requiring servicing *and being configured to block servicing commands received from a servicing computational component, the servicing computational component being located logically outside a network segment protected by the firewall and being associated with a servicing entity responsible for servicing components located logically in the network segment and wherein the computational component requiring servicing is positioned logically in the network segment protected by the firewall;*
- establishing, through the firewall, a session *with the servicing entity* via the servicing computational component, *packets of the session comprising servicing commands from the servicing entity and corresponding responses from the computational component requiring servicing, with the incoming packets being permitted to pass through the firewall, wherein the session is of a session type otherwise permitted by the firewall and unrelated to servicing, by the servicing entity, of the computational component requiring servicing, wherein the type of session is intended for person-to-person communications, and wherein the session packets exclude message content intended for a human recipient;*
- sending, by the firewall, a *servicing* command received in one or more packets associated with the session to the computational component requiring servicing, *each of the one or more packets comprising at least part of a machine executable servicing command from the servicing entity for the computational component requiring servicing;*
- receiving, from the computational component requiring servicing, a *servicing response to the servicing command;*
- configuring the servicing response as a packet associated with the session; and*
- forwarding, by the firewall, the *servicing response* packet to the servicing computational component.

Freed, et al., is directed to a system and method for providing distributed and dynamic network services to remote access users. One of the methods includes providing a first certificate for requesting dynamic network services by a user network entity, and at least one second certificate for requesting static network services by the user network entity. A user of the user network entity may generate a first message to request dynamic network services from a network service provider entity. For example, the first message may include the first certificate, a digital signature generated with a private encryption key associated with the first certificate and list of network service that the user wishes to set up dynamically. When the network service provider entity receives the first message, the network service provider entity verifies the authenticity of the first certificate and, if the first certificate is authentic, the network service provider entity configures a network connection between the user network entity and a data network based on the network services requested by the user in the first message.

The system of Freed, et al., is a data-over-cable system, such as a cable modem termination system connected to a cable television network. The system 10 includes a policy/authorization server and a bandwidth manager. Packet protocols employed including the Point-to-Point Protocol, Internet Protocol, Internet Control Message Protocol, User Datagram protocol, Simple Network Management Protocol, Dynamic Host Configuration Protocol, and Trivial File Transfer Protocol.

Freed, et al., fails to teach or suggest a servicing entity tunneling through a firewall, otherwise configured to block servicing packets, by using servicing commands disguised as a type of session (unrelated to servicing) passed by the firewall.

The Examiner responds by asserting that column 26, lines 6-26, recites “establishing a communication session with the ISP 156” and “the network service provider entity receives a first message from a user network entity”. “In the embodiment associated with the method 320, the first message includes a first message [packet] type defining a dynamic network service request, a first authorization record that the user network entity employs to dynamically request network services, a list of the filtering [blocking] rules.”

The language relied upon by the Examiner, however, falls far short of teaching the language italicized in the claims. The language is silent on how to tunnel through the firewall to deliver servicing commands to components on the protected network components. The network service request is normally associated with the TCP/IP suite of protocols.

The Examiner further asserts that servicing commands are disclosed at col. 26, lines 6-26 and col. 10, lines 1-55. Although the language describes a “service request”, the request is unrelated to servicing a computational component but rather is related to providing a selected network service to a remote access user or subscriber. Applicant has amended the claims to clarify that the “service command” is generated by a servicing entity responsible for servicing a selected computational component.

The Examiner, in reliance on col. 26, lines 6-26, further asserts that the “servicing requests” in Freed, et al., are not normally associated with the session type by which they are conveyed. Applicant disagrees. At this passage, Freed, et al., state that “the first message includes a first message type defining a dynamic network service request . . . a format of the first message . . . may include the message format 230 described in reference to Fig. 9.” This passage

clearly states the first message type defines, and therefore is normally associated with, the network service request.

Finally, the Examiner asserts that Freed, et al., teaches, at col. 10, lines 1-55, tunneling. Applicant disagrees. Nowhere in this passage does Freed, et al., teach or suggest tunneling.

Accordingly, the pending claims are allowable.

The dependent claims provide further reasons for allowability.

By way of example, dependent claim 2 requires the session to be a real-time or near real-time session and the servicing command to be associated with at least one of maintenance, diagnosis, provisioning, administration, monitoring, operating, repair, replacement, (re)configuring, and servicing of the computational component. (See claims 19 and 34.)

Dependent claim 3 requires the forwarding step to occur at least substantially immediately after the receiving step and the session type to be a computer telephony session. (See claims 20 and 35) The TCP/IP suite of protocols disclosed in Freed, et al., does not itself enable a computer telephony session.

Dependent claim 4 requires the session to be configured as an instant messaging session and voice and data messages to be omitted from the incoming packet. (See claims 21 and 36.) Freed, et al., say nothing about using a protocol normally used only for instant messaging.

Dependent claim 5 requires the session to be configured as a voice-over-IP session. (See claims 22 and 37.) Freed, et al., say nothing about using a protocol normally used only for VoIP.

Dependent claim 6 requires the packet header and trailer to be configured as a voice-over-IP packet while the payload comprises text setting forth the machine executable servicing command. (See claims 23 and 38.) Freed, et al., say nothing about using a protocol normally used only for VoIP.

Dependent claim 7 requires the packet header and trailer to be configured as an instant message packet but the payload comprises the machine executable servicing command. (See claims 24 and 39.) Freed, et al., say nothing about using a protocol normally used only for instant messaging.

Dependent claim 8 requires the machine executable servicing command not to be associated with operation of a graphical user interface or the display of information. (See claims 25 and 40.)

Dependent claim 9 requires the servicing command to be associated with at least one of the following call processing parameters: Digital Communication System or DCS call coverage, audible message waiting, vectoring, attendant vectoring, Asynchronous Transfer Mode or ATM WAN spare processor, ATM, dial by name, echo cancellation, multimedia call handling, multiple call handling, caller identification, multifrequency signaling, Integrated Services Digital Network or ISDN network call redirection, centralized attendant, remote office, enhanced Direct Inward Dialing or DID routing, survivable remote processor, time of day routing, tenant partitioning, hospitality announcements, Vector Directory Number or VDN of origin announcement, wideband switching, wireless, logged-in automated call distribution or ACD agents, maximum currently registered IP stations, maximum administered IP trunks, offer category, maximum number of ports, maximum number of administered remote office trunks, maximum number of mobile stations, abbreviated dialing enhanced list, audible message waiting, vectoring, answer supervision by call classifier, ATM trunking, agent states, dial by name, DCS call coverage, echo cancellation, multifrequency signaling, wideband switching, logged-in agents, offer category, maximum numbers of concurrently registered IP stations, administered IP trunks, ports, and concurrently administered remote office stations/trunks, call center release, features that have a product value (*e.g.*, corresponding to a product name or type), a release number (*e.g.*, referring to a product release identifier), and numeric value(s) (*e.g.*, indicating an operational parameter associated with the product and/or release, such as how many ports are licensed, how many licenses for the product are granted, how many concurrent users are allowed, and/or how many stations can be concurrently administered with the feature). (See claims 26 and 41.) These servicing commands are neither suggested nor disclosed by Freed, et al.

Dependent claim 10 requires the servicing command to be associated with at least one of the following user features: (a) features that are invoked prior to placing a call, (b) features that are invoked during a call, (c) features that are non-call associated that do not require display interactions, (d) features that are non-call associated that require display interactions, (e) features that are operated against calls not associated with the activating station, and (f) features that are operated against an alerting call. (See claims 27 and 42.) These servicing commands are neither suggested nor disclosed by Freed, et al.

Dependent claim 11 requires the servicing command to be associated with at least one of the following user features: analog bridged appearance select, abbreviated dialing, active appearance select, automatic appearance select, automatic call back, automatic intercom, autodial, bridged appearance selection, call appearance selection, call forwarding all, call forwarding busy/no answer, call forwarding deactivation, call park, call unpark, call pick-up, conference no answer, conference, calling party number block, calling party number unblock, dial intercom, directed call pick-up, drop last added party, drop call, exclusion (which prevents a user from being active on the same call on a physical port and a trunk port), extend call off-switch enable (to enable the mapping agent), extend call off-switch disable (to disable the mapping agent), group page, handover, held appearance select, hunt night service, last number dialed, malicious call trace activation, malicious call trace deactivation, manual message waiting, priority call, send all calls, manual signaling, transfer on hang up, transfer to voice mail, and trunk night service. (*See* claims 28 and 43.) These servicing commands are neither suggested nor disclosed by Freed, et al.

Dependent claim 12 requires the session to be point-to-point. (*See* claims 29 and 44.)

Dependent claim 13 requires the type of the session is not intended to be associated with a servicing command. In Freed, et al., the session type is normally associated with service requests.

Dependent claim 14 requires the further steps:

receiving a servicing response to the servicing command from the computational component requiring servicing;
configuring the servicing response as at least one packet associated with the session; and
sending the at least one servicing response packet to the servicing computational component. (*See* claims 31 and 46.)

Dependent claim 15 requires the type of session to be intended for person-to-person communications. (*See* claim 32.) Freed, et al., are silent on tunneling using a protocol normally used only for interpersonal communications.

Dependent claim 47 requires the servicing command is associated with at least one of maintenance, diagnosis, provisioning, administration, monitoring, operating, repair, replacement, (re)configuring, and servicing of the computational component and the session type is a computer telephony session.

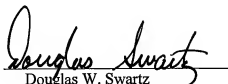
Based on the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

SHERIDAN ROSS P.C.

Date: Dec. 30, 2008

By:


Douglas W. Swartz
Reg. No. 37,739
1560 Broadway, Suite 1200
Denver, Colorado 80202
Telephone: 303-863-9700